

OPTIONAL MODULE

Using a Tourniquet and Hemostatic Dressing

Lesson Length: 25 minutes

GUIDANCE FOR THE INSTRUCTOR

- To complete this lesson and meet the lesson objectives, you must:
- Show the video segment, “Using a Commercial Tourniquet” (1:21)
- Conduct the appropriate Using a Manufactured Tourniquet skill-practice session(s) for the course being taught.
- Conduct the Using a Hemostatic Dressing Discussion
- Conduct the Lesson Wrap-Up.

LESSON OBJECTIVES

After completing this lesson, participants will be able to:

- Demonstrate how to control severe, life-threatening bleeding using a manufactured tourniquet.
- Explain when to use a hemostatic dressing when there is severe life-threatening bleeding.

MATERIALS, EQUIPMENT AND SUPPLIES

- Tourniquets (commercially manufactured)
- Simulated limb(s) for demonstrating use of a tourniquet or trauma manikin(s)
 - A pool “noodle” may be used as a simulated limb.

TOPIC:

WHEN TO USE A COMMERCIAL TOURNIQUET OR HEMOSTATIC DRESSING



Instructor’s Note: Conduct this module after Lesson 6: Injuries, or at the end of the course.

1. If the bleeding is not controlled by direct pressure alone, other methods of controlling bleeding may be considered including the use of tourniquets for extremities and hemostatic dressings for areas where a tourniquet is not possible such as the trunk, groin or neck and severe life-threatening bleeding is present.
2. A tourniquet is a tight band placed around an arm or leg to constrict blood vessels in order to stop blood flow to a wound.
3. Tourniquets are used when standard first aid hemorrhage control (direct pressure) does not control severe life-threatening hemorrhage in an extremity. A tourniquet may be considered for initial care when a first aid provider is unable to use standard first aid hemorrhage control, such as during a mass casualty incident, with a person who has multisystem trauma, in an unsafe environment, or with a wound that

cannot be accessed.

- 4. Tourniquets rarely are necessary, but if one is needed to control bleeding, manufactured tourniquets are safer, more effective and preferred over makeshift devices.*
- 5. If used, the tourniquet should be applied and kept in place continuously until more advanced medical personnel take over or the person reaches a medical facility.*
- 6. A hemostatic dressing is a dressing impregnated with an agent or chemical that assists with clot formation.*

Conduct this module after Lesson 6: Injuries, or at the end of the course.

- 1. Hemostatic dressings may be considered by first aid providers when standard bleeding control (direct pressure with or without gauze or cloth dressing) is not effective for severe or life-threatening bleeding. Hemostatic dressings are likely of greatest use for severe external bleeding in locations where standard hemorrhage control is not effective, when a tourniquet cannot be applied (trunk or junctional areas such as the abdomen or axilla/groin), when a tourniquet is not available, or when a tourniquet is not effective to stop bleeding.*
- 2. Hemostatic dressing need to be applied at the site of the bleeding often inside the body and sometimes need to be packed inside the wound. First aid providers need to follow the manufacture's recommendations for application.*
- 3. In order to be effective hemostatic dressings require continuous direct pressure upon application until bleeding is controlled.*
- 4. Anytime a hemostatic dressing is applied the person needs to be evaluated by a healthcare professional.*

USING A TOURNIQUET

INSTRUCTION:



- Show the video segment, “Using a Commercial Applying a Manufactured Tourniquet” (1:21).
- Demonstrate how a manufactured tourniquet is applied.
- Answer participants’ questions.

USING A COMMERCIAL TOURNIQUET SKILL SESSION

INSTRUCTION:




Instructor’s Note: Always follow standard precautions and CALL more advanced medical personnel. Always follow the manufacturer’s instructions when applying a tourniquet.

Whenever possible, practice this skill by applying the tourniquet to a simulated limb. DO NOT allow participants to practice this skill on each other. When using a commercial tourniquet, follow manufacturer’s instructions.

To make a simulated limb, wrap two layers of carpet padding around a 3-inch diameter piece of PVC pipe that has been cut to about 16 inches in length. Cover the carpet padding by wrapping it in flesh-colored self-adhesive bandaging. Cut away one pant leg from an old pair of jeans or slacks and slide it over the simulated limb. To make the simulated limb more realistic, make a rip in the pant leg and simulate an injury using moulage techniques. An alternative technique would be to use a pool “noodle” cut into 12-18 inch sections.

Closely monitor skill practice to ensure that participants are correctly following all manufacturer’s instructions and steps outlined in the skill chart. Inform participants when they have tightened the tourniquet sufficiently to stop the bleeding.

1. Ask participants to find a partner (or divide them into small groups if the number of training devices is limited) and guide them as a group through the steps listed on the skill chart.
2. Have partners (or groups) practice the skill using a simulated limb or trauma manikin, if available.

LESSON WRAP-UP	
<p>INSTRUCTION:</p> 	<ol style="list-style-type: none"> 1. What is the definition of a tourniquet? Answer: <i>A tourniquet is a tight band placed around an arm or leg to constrict blood vessels to stop blood flow to a wound.</i> 2. When should a tourniquet be applied? Answers: <i>Responses should include the following:</i> <ul style="list-style-type: none"> ▪ Direct pressure does not control severe life-threatening hemorrhage in an extremity ▪ When a first aid provider is unable to use standard first aid hemorrhage control such as: <ul style="list-style-type: none"> ▪ during a mass casualty incident, ▪ with a person who has multisystem trauma, ▪ in an unsafe environment, or ▪ with a wound that cannot be accessed. 3. If you are applying a tourniquet for a leg wound at the middle of the thigh, should you position the tourniquet 2 inches from the wound and toward the person’s knee or 2 inches from the wound and toward the person’s waist? Answer: <i>Position the tourniquet around the limb, approximately 2 inches above the wound but not over a joint, in this case toward the person’s waist.</i> 4. What is the definition of a hemostatic dressing? Answer: <i>A dressing impregnated with a chemical or agent that promotes clotting.</i> 5. When should a hemostatic dressing be used? Answer: <i>Hemostatic dressings may be considered by first aid providers when standard bleeding control (direct pressure with or without gauze or cloth dressing) is not effective for severe life-threatening bleeding. Hemostatic dressings are likely of greatest use for severe external bleeding in locations where standard hemorrhage control is not effective, when a tourniquet cannot be applied (trunk or junctional areas such as the abdomen or axilla/groin), when a tourniquet is not available, or when a tourniquet is not effective to stop bleeding.</i>

SKILL SHEET

Skills Practice—Using a Manufactured Tourniquet

INSTRUCTION:



1. Position the tourniquet around the limb, approximately 2 inches above the wound but not over a joint.
2. Route the tag end of the strap through the buckle, if necessary.
3. Pull the strap tightly and secure it in place.
4. Tighten the tourniquet by twisting the rod until the flow of bleeding stops and secure the rod in place. Do not cover the tourniquet with clothing.
Note and record the time that you applied the tourniquet and give this information to more advanced medical personnel.